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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

MAILED

Application Number: 09/942,834 Filing Date: August 29, 2001 Appellant(s): GORTHY ET AL.

JAN 1-1 2008

**Technology Center 2100** 

Thomas M. Croft (44,051)
For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed October 16, 2007 appealing from the Office action mailed January 3, 2006.

#### (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

#### (2) Related Appeals and Interferences

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

U.S. Application No. 09/942,833 entitled SYSTEM AND METHOD FOR MODELING A NETWORK DEVICE'S CONFIGURATION is also assigned to Intelliden Inc. and is also currently under appeal.

U.S. Application No. 09/730,682 entitled NETWORK OPERATING SYSTEM DIRECTORY is also assigned to Intelliden Inc. and is also currently under appeal.

#### (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

### (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

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#### (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

#### (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

#### (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

#### (8) Evidence Relied Upon

6,959,332	ZAVALKOVSKY	10-2005
6,816,897	McGUIRE	11-2004
2003/0048287	LITTLE	3-2003

## (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6-9, 11, 12, 16, 24, 25, 27, are rejected under 35 U.S.C. 103(a) as being unpatentable over Zavalkovsky in view of McGuire.

In considering claims 6 and 24, Zavalkovsky teaches an electronic method and computer program product comprising: accessing a network component, (col. 7, lines 56-67); retrieving a command set from the network component the command set including commands that the network component is capable of responding to, (col. 7, lines 56-67); determining a characteristic of the network component, wherein the determined characteristic is indicative of at least one of: device type, manufacturer, model, and operating system version, (col. 8, lines 1-6); generating a configuration schema using the retrieved command set, wherein the generated configuration schema corresponds to the network component, (col. 7, line 56 through col. 8, line 21); and storing the generated configuration data, (col. 8, lines 1-21).

Although the teachings of Zavalkovsky shows substantial features of the claimed invention they fail to expressly disclose: enabling the configuration schema to be identified from among a collection of configuration schemas that includes configuration schemas that are associated with other network components.

Nevertheless, in a similar field of endeavor, McGuire teaches: enabling configuration schemas to be identified from among a collection of configuration

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schemas that include configuration schemas that are associated with other network components, (col. 6, lines 16-35).

Thus, given the teachings of McGuire, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Zavalkovsky to show enabling the configuration schema to be identified from among a collection of configuration schemas that includes configuration schemas that are associated with other network components. This would have advantageously provided an efficient means for maintaining a library of configuration schemas to be used in configuring a variety of network components, (McGuire, col. 6, lines 16-35, Zavalkovsky, col. 3, lines 44-64).

In considering claims 7 and 25, Zavalkovsky teaches activating a command extraction mode of the network component, (col. 7, lines 56-67).

In considering claims 8 and 27, the teachings of Zavalkovsky provide a means for retrieving a set of primary commands, (col. 7, lines 56-67); retrieving a set of subcommands for each of the primary commands in the set of primary commands, (col. 7, lines 56-67); retrieving a set of bounds for a plurality of the set of subcommands for a first primary command, (col. 7, lines 56-67). 25.

In considering claim 9, Zavalkovsky provides a means for identifying a command array in the command set, wherein the command array includes a primary command and a subcommand associated with the primary command (col. 7, line 56 through col. 8,

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line 21); extracting the primary command from the command array (col. 7, line 56 through col. 8, line 21); and extracting the subcommand from the command array (col. 5, line 56 through col. 8, line 21).

In considering claim 11, Zavalkovsky further provides a means for configuring the router according to a first set of primary commands, (col. 7, line 56 through col. 8, line 21); retrieving a second command set, (col. 7, lines 56-67); wherein the second command set includes a plurality of subcommands associated with the first of the plurality of primary commands and wherein the first command set and the second command set are different (col. 7, line 56 through col. 8, line 21). 27.

In considering claim 12, Zavalkovsky teaches cleansing the retrieved command set, (col. 8, lines 13-21).

In considering claim 16, Zavalkovsky teaches accessing a router, (col. 7, lines 56-67).

Claim 10, is rejected under 35 U.S.C. 103(a) as being unpatentable over Zavalkovsky in view of McGuire and further in view of Little.

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In considering claim 10, Zavalkovsky further teaches a means for: forming a generic object using the extracted primary command and the extracted subcommand, (col. 7, line 56 through col. 8, line 21).

Although the disclosed teachings of Zavalkovsky shows substantial features of the claimed invention they fail to expressly disclose: the generic object being XML-based.

Nevertheless, in a similar field of endeavor, Little teaches a command line interface abstraction engine in which XML-based commands are translated to CLI-based commands for an embedded system, (page 1, paragraph 8), by means of a DTD-schema (page 4, paragraphs 63-65).

Thus, given the teachings of Little, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Zavalkovsky with Little to show the generic object being XML-based. This would have advantageously demonstrated a specific example for implementing a generalized user interface to CLI-based routers that were known in the art to be difficult to manage and maintain, (Little, page 1, paragraph 7, Zavalkovsky, col. 3, lines 44-64).

## (10) Response to Argument

With regards to claims 6-9, 11, 12, 16, 24, 25, and 27, more specifically with regards to independent claims 6 and 24, appellant's first argue on pages 19 and 20, that Zavalkovsky and McGuire neither disclose nor suggest "retrieving a command set from the network component".

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In response, examiner maintains Zavalkovsky teaches "retrieving a command set from the network component" at least where Zavalkovsky discloses obtaining "device configuration information" using a special CLI command, or by other conventional means, (col. 7, lines 56-67). It is evident that the retrieved "configuration information" taught by Zavalkovsky is a "command set" at least where Zavalkovsky teaches the configuration information comprises "command line interface (CLI) commands that represent the current configuration of the network device", (see abstract). Further, appellant teaches in the specification that commands retrieved from network components are "generally expressed in terms of a CLI-based command structure", (see pg. 5, par. 0012). Thus, examiner maintains even when reading in light of appellant's specification, the interpretation of appellant's claimed invention given in previous actions is proper since appellant's claimed invention fails to distinguish from the teachings of Zavalkovsky.

Appellant's further argue on page 19, that Zavalkovsky and McGuire neither disclose nor suggest "retrieving a command set from the network component" because Zavalkovsky does not teach retrieving anything that can be used to generate a "configuration schema" as recited in claim 6.

In response, examiner has interpreted the "configuration schema" claimed by appellant as the "final list of basic commands" taught by Zavalkovsky, (see col. 7, line 56 through col. 8, line 21). For the reasons previously indicated above, it is clear in the cited passages that the final list of basic commands is generated by the retrieved configuration information (i.e. command set) taught by Zavalkovsky. Further, similar to

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the teachings of Zavalkovsky, appellant teaches in the specification that the configuration schema is generated from commands, wherein "duplicate commands" are removed, and wherein the generated configuration schema represents the network components "command structure", (see pg. 10, par. 0022). Thus, examiner maintains even when reading in light of appellant's specification, the interpretation of appellant's claimed invention given in previous actions is proper since appellant's claimed invention fails to distinguish from the teachings of Zavalkovsky.

With regards to claims 6-9, 11, 12, 16, 24, 25, and 27, more specifically with regards to independent claims 6 and 24, appellant's argue on page 20, that Zavalkovsky and McGuire neither disclose nor suggest "generating a configuration schema using the command set".

In response, in addition to the reasons indicated above, examiner maintains

Zavalkovsky teaches "generating a configuration schema using the command set" at
least where Zavalkovsky discloses generating a "final list of basic commands" (i.e.
configuration schema) using the retrieved "configuration information" (i.e. command
set), (see abstract, also see pg. 7, line 56 through pg. 8, line 21). Further, similar to the
teachings of Zavalkovsky, appellant teaches in the specification that commands
retrieved from network components can be used to generate a configuration schema in
a format "which is more manageable than a CLI-based format", (see pg. 5, par.'s 0011
and 0012). Thus, examiner maintains even when reading in light of appellant's
specification, the interpretation of appellant's claimed invention given in previous actions

is proper since appellant's claimed invention fails to distinguish from the teachings of Zavalkovsky.

Appellant's further argue on page 20, that Zavalkovsky and McGuire neither disclose nor suggest "retrieving a command set from the network component" because neither "configuration schema" nor "schema" appear in Zavalkovsky.

In response, examiner acknowledges that the exact term "configuration schema" does not appear in the disclosure of Zavalkovsky. Nevertheless, as indicated above, examiner has interpreted appellant's claimed "configuration schema" as the "final list of basic commands" taught by Zavalkovsky, (see col. 7, line 56 through col. 8, line 21). As was known in the art at the time of the present invention, a schema is a diagram or representation showing the basic outline of something. Thus, examiner maintains the interpretation given to appellant's claimed invention was proper since the final list of basic commands at least represented "a new configuration for the device". This is taught by Zavalkovsky at least in col. 8, lines 13-21. Further, examiner maintains even when reading in light of appellant's specification, nothing in appellant's claimed invention teaches away from such an interpretation.

Appellant's further argue on page 20, that the rejection of claims 6 and 24 are improper for failing to identify with any specificity the constructs within Zavalkovsky that allegedly correspond to the claimed "configuration schema".

In response, examiner submits it was believed by the examiner that the interpretation given to appellant's claimed invention was clear in the passages cited in previous office actions. Further, examiner would have clarified the interpretation given

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to the claimed invention, as shown above, if appellant would have indicated they were confused about examiner's interpretation earlier in the prosecution of appellant's claimed invention. For reasons indicated above, examiner maintains the rejection of claims 6 and 24 is proper.

Appellant's still further argue on page 20, the rejection of claims 6 and 24 are improper since the final action does not specifically identify any language nor any constructs in the cited passages of Zavalkovsky that teaches a "configuration schema," a "command set," "primary commands," "subcommands," a "command array," "a second command set," and a "set of bounds".

In response, as indicated above, examiner submits it was believed by the examiner that the interpretation given to appellant's claimed "configuration schema" and "command set" was clear in the passages cited in previous office actions. Further, examiner submits the claimed features for "primary commands," "subcommands," a "command array," "a second command set," and a "set of bounds" were not recited in independent claims 6 and 24. Nevertheless, examiner maintains such features are at least implied in the cited passages of Zavalkovsky. When reading in light of appellant's specification (see pg. 4, par. 0009 through pg. 5, par. 0012) it is clear such commands would be included in the set of commands retrieved from the network device taught by Zavalkovsky, since such commands represent the type of configuration information being retrieved from the network device taught by Zavalkovsky, (see Zavalkovsky, abstract, also see pg. 7, line 56 through pg. 8, line 21). For reasons indicated above, examiner maintains the rejection of claims 6 and 24 is proper.

With regards to claims 6-9, 11, 12, 16, 24, 25, and 27, more specifically with regards to independent claims 6 and 24, appellants argue on page 21, that Zavalkovsky neither discloses nor suggests "storing the generated configuration schema".

In response, for reasons previously indicated above, examiner maintains

Zavalkovsky teaches "storing the generated configuration schema" where Zavalkovsky
teaches storing the generated "final list of basic commands", (col. 8, lines 13-21).

Examiner maintains even when reading in light of appellant's specification, nothing in
appellant's claimed invention teaches away from the interpretation given to the claims
by the examiner.

With regards to claims 6-9, 11, 12, 16, 24, 25, and 27, more specifically with regards to independent claims 6 and 24, appellants argue on page 21, that the Final Action does not identify with any specificity the construct in McGuire that allegedly corresponds to the "configuration schema".

In response, as indicated above, it was well known in the art at the time of the present invention that a schema is a diagram or representation showing the basic outline of something. Thus, just as the examiner interpreted appellant's claimed "configuration schema" as the "final list of basic commands" taught by Zavalkovsky, examiner also interpreted appellant's claimed "configuration schema" as the "commands specific to the device(s) to which they correspond" as taught by McGuire, (col. 6, lines 16-35). Examiner submits it was believed by the examiner that the

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interpretation given to appellant's claimed "configuration schema" was clear in the passages cited in previous office actions for the reasons indicated above. Examiner maintains even when reading in light of appellant's specification, nothing in appellant's claimed invention teaches away from the interpretation given to the claims by the examiner.

With regards to claims 6-9, 11, 12, 16, 24, 25, and 27, more specifically with regards to dependent claim 8, appellant's argue on pages 22 and 23, that the Final Action does not identify with any specificity as to what commands disclosed by Zavalkovsky allegedly correspond to the "primary commands", "subcommands", or "sets of bounds" as recited in claim 8.

In response, examiner submits although the exact terms "primary commands", "subcommands", or "sets of bounds" are not recited in the disclosure of Zavalkovsky, as indicated above, examiner maintains such limitations are at least implied in the teachings of Zavalkovsky at least where Zavalkovsky teaches retrieving configuration information from a network device, (col. 7, lines 56-67), the configuration information comprising CLI commands that represent the current configuration of the network device, (see abstract). Examiner submits appellant's claimed limitations are at least implied in the aforementioned passages since primary commands, subcommands and sets of bounds are all information that represent a current configuration of a network device, and thus would be included in the information retrieved from the network device taught by Zavalkovsky. This is further evident when reading in light of the teachings of

appellant's specification, (pg. 4, par. 0009 through pg. 5, par. 0012). Thus, examiner maintains even when reading in light of appellant's specification, the interpretation of appellant's claimed invention given in previous actions is proper since appellant's claimed invention fails to distinguish from the teachings of Zavalkovsky.

With regards to claims 6-9, 11, 12, 16, 24, 25, and 27, more specifically with regards to dependent claim 9, appellant's argue on pages 23 and 24, that the Final Action does not identify with any specificity as to what construct disclosed by Zavalkovsky allegedly corresponds to the "command array" recited in claim 9, and thus Zavalkovsky can not possibly teach extracting the primary command from the command array and extracting the subcommand from the command array as recited in claim 9.

In response, examiner submits although the exact term "command array" is not recited in the disclosure of Zavalkovsky, examiner maintains the limitations of claim 9 are at least implied in the teachings of Zavalkovsky at least where Zavalkovsky teaches identifying a CLI command list and converting each CLI command in the list into one or more Basic Commands, (see col. 7, line 56 through col. 8, line 21). Examiner submits appellant's claimed limitations are at least implied in the aforementioned passages since as previously indicated above, primary commands and subcommands are commands that will be found in the CLI command list and thus a "command array" as claimed by appellant, will also be found in the CLI command list. Further, as previously indicated, Zavalkovsky teaches converting **each** CLI command in the list into one or more Basic Commands. With regards to the claimed limitations, appellant's

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specification teaches a similar procedure to that taught by Zavalkovsky, (see pg. 5, par.'s 0011 and 0012). Thus, examiner maintains even when reading in light of appellant's specification, the interpretation of appellant's claimed invention given in previous actions is proper since appellant's claimed invention fails to distinguish from the teachings of Zavalkovsky.

With regard to dependent claim 10, appellants argue on pages 24 and 25, that Zavalkovsky does not teach extraction of any commands, nor does Zavalkovsky disclose any "primary commands" or "subcommands". Appellant's further argue Zavalkovsky does not teach nor suggest forming a generic object as the Final Action indicates, and in addition the Final Action does not state a clear basis for the conclusion that Little's command line interface abstraction engine renders obvious the claimed XML object that is formed using the extracted primary command and the extracted subcommand.

In response, examiner maintains Zavalkovsky teaches the extraction of both primary commands and subcommands for the reasons indicated above. Further, examiner maintains forming a generic object using the extracted primary command and extracted subcommand is at least implied in the teachings of Zavalkovsky where Zavalkovsky discloses forming a final list of basic commands that represent a new configuration for a device. As was known in the art at the time of the present invention, a generic object could be a collection of variables, data structures, and procedures stored as an entity and forming a basic building block of object-oriented programming.

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Zavalkovsky clearly discloses that a basic command in the final list of basic commands comprises such a generic object, (col. 8, lines 13-21, also see col. 6, lines 4-14). Examiner thus maintains interpretation given to appellant's claimed invention in the final action is proper. Further, examiner maintains the basis for the conclusion that Little's command line interface abstraction engine renders obvious the claimed XML object that is formed using the extracted primary command and the extracted subcommand is clear since, as indicated in the final action, given the teachings of Little one of ordinary skill in the art would have readily recognized the advantages of modifying the teachings of Zavalkovsky with Little to include being able to implement a generalized user interface to CLI-based routers using a user-friendly programming language such as XML. Such an interface would have provided a high level of abstraction to a user, thus relieving a user from having to deal with the commands associated with CLI routers that were well known in the art as being difficult to manage and maintain, (Little, page 1 par. 7, Zavalkovsky, col. 3, lines 44-64). Examiner maintains even when reading in light of appellant's specification, nothing in appellant's claimed invention teaches away from the interpretation given to the claims by the examiner.

With regards to claims 6-9, 11, 12, 16, 24, 25, and 27, more specifically with regards to dependent claim 11, appellant's argue on pages 25 and 26, that the Final Action does not identify with any specificity as to what constructs disclosed by Zavalkovsky allegedly correspond to the "first command set", "second command set", or

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"plurality of commands", wherein the first command set and the second command set are different, as recited in claim 11.

In response, examiner submits although the exact terms "first command set", "second command set", or "plurality of commands" are not recited in the disclosure of Zavalkovsky, as indicated above, examiner maintains such limitations are at least implied in the teachings of Zavalkovsky at least where Zavalkovsky teaches retrieving configuration information from a network device, (col. 7, lines 56-67), the configuration information comprising CLI commands that represent the current configuration of the network device, (see abstract). Examiner submits appellant's claimed limitations are at least implied in the aforementioned passages since a first command set, second command set, or plurality of commands are all information that represent a current configuration of a network device and thus would be included in the information retrieved from the network device taught by Zavalkovsky. This is further evident when reading in light of the teachings of appellant's specification, (pg. 4, par. 0009 through pg. 5, par. 0012). Examiner further maintains the claimed limitation, "wherein the first command set and the second command set are different", as recited in claim 11 is also at least implied in the teachings of Zavalkovsky at least where Zavalkovsky teaches determining duplicate and similar commands created from the CLI command list, (col. 8, lines 13-21). Examiner submits appellant's claimed limitation is at least implied in the aforementioned passages since there would be no need to determine duplicate or similar commands created from the CLI command list if the command sets in the CLI command list were always the same. Thus, examiner maintains even when reading in

light of appellant's specification, the interpretation of appellant's claimed invention given in previous actions is proper since appellant's claimed invention fails to distinguish from the teachings of Zavalkovsky.

With regards to claims 6-9, 11, 12, 16, 24, 25, and 27, more specifically with regards to dependent claim 12, appellant's argue on page 27, that Zavalkovsky does not teach retrieving the claimed "command set" from a network component, so Zavalkovsky can not possibly teach cleansing the claimed command set. Moreover, Zavalkovsky does not teach "cleansing".

In response, examiner maintains Zavalkovsky teaches retrieving the claimed "command set" from a network component for reasons previously indicated above.

Further, examiner submits although the exact term "cleansing" is not recited in the disclosure of Zavalkovsky, when reading in light of appellant's specification (see pg. 4, par. 0010), examiner maintains cleansing is at least implied in the teachings of Zavalkovsky at least where Zavalkovsky teaches eliminating duplicate commands and merging similar commands into fewer basic commands, (see col. 8, lines 13-21). Thus, examiner maintains even when reading in light of appellant's specification, the interpretation of appellant's claimed invention given in previous actions is proper since appellant's claimed invention fails to distinguish from the teachings of Zavalkovsky.

With regards to claims 6-9, 11, 12, 16, 24, 25, and 27, more specifically with regards to dependent claim 27, appellants argue on pages 27 and 28, that Zavalkovsky

does not teach retrieving a bound for a first command. Moreover, the Final Action does not provide any specificity as to what language within Zavalkovsky allegedly teaches the "bound" limitation.

In response, examiner submits although the exact term "bound" is not recited in the disclosure of Zavalkovsky, as indicated above, examiner maintains this limitation is at least implied in the teachings of Zavalkovsky at least where Zavalkovsky teaches retrieving configuration information from a network device, (col. 7, lines 56-67), the configuration information comprising CLI commands that represent the current configuration of the network device, (see abstract). As indicated above, examiner submits appellant's claimed limitation is at least implied in the aforementioned passages since a bound is information that represents a current configuration of a network device, and thus would be included in the configuration information retrieved from the network device as taught by Zavalkovsky. This is evident when reading in light of the teachings of appellant's specification, (pg. 4, par. 0009 through pg. 5, par. 0012). Thus, examiner maintains even when reading in light of appellant's specification, the interpretation of appellant's claimed invention given in previous actions is proper since appellant's claimed invention fails to distinguish from the teachings of Zavalkovsky.

## (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Hassan Phillips

( **John Follansbe**e Supervisory **Patent** Examine

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Conferees:

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